

**REMARKS**

In the May 6, 2008 Office Action, the Examiner noted that claims 1-92 were pending in the application; rejected claims 1-14, 26-46, 58-72 and 79-86 under 35 U.S.C. § 102(e); and rejected claims 15-25, 47-57, 73-78 and 87-92 under 35 U.S.C. § 103(a). In rejecting the claims U.S. Patent Application Publication 2002/0173955 to Reich and U.S. Patent 5,625,748 to McDonough et al. (References A and B). The rejections are traversed below.

**Rejection under 35 U.S.C. § 102(e)**

On pages 2-5 of the October 5, 2008 Office Action, claims 1-14, 26-46, 58-72 and 79-86 were rejected under 35 U.S.C. § 102(e) as anticipated by Reich. Reich describes a speech recognition system capable of determining when a high likelihood exists that a recognition result does not accurately reflect received user speech. According to paragraph [0020], when a confidence score generated by the speech recognition system is below a predetermined threshold, the speech recognition system presents the user at least one "potential accurate recognition result corresponding to the received user speech". Then, the user is asked to select "which of the potential word candidates is an accurate recognition result for the received user speech."

Nothing has been cited or found in Reich that teaches or suggests "using the statistics to process **automatically** an original output sequence of the automatic system" (claim 1, lines 4-5); for example, in a case where the "automatic system for probabilistic detection of events" (claim 1, lines 1-2, emphasis added) processes "received user speech" and the "statistics related to observed outputs of the automatic system" (claim 1, line 3) are "confidence score[s] generated by the speech recognition system" (Reich, paragraph [0020], second sentence). Instead of processing the confidence scores "automatically" as now clearly recited in the independent claims, the system described in Reich relies on input from a user to select from a list of potential word candidates.

In an embodiment described in the application under examination, automatic processing of the statistics is possible by using a training system to determine the accuracy of an observed output of a text generating system (such as, for example, an automatic speech recognition system). The training system uses training data based on data that is more reliable than the output of the text generation system to generate a statistical model and determine the accuracy of the output of the text generation system. This statistical model is then used to process automatically original output sequences of the text generation system to produce alternate output sequences that correct and supplement/replace incorrect transcription by the text

generation system. For example, when an automatic speech recognition system (ASR) transcribes original speech, the present invention can be used to process and correct errors based on confidence scores of the original transcription using statistical models collected from observed outputs from training data processed by the ASR system (see paragraphs [0023] to [0027] of the application).

For the above reasons, it is submitted that claim 1, as well as claims 2-14 and 26-32 which depend therefrom, patentably distinguish over Reich.

Claim 33 is directed to a computer readable medium that stores instructions for controlling at least one computer system to perform a method of "processing outputs of an automatic system for probabilistic detection of events" (claim 33, lines 2-3) that includes operations worded the same as in claim 1. Therefore, it is submitted that claim 33, as well as claims 34-46 and 58-64 which depend therefrom, patentably distinguish over Reich.

Claim 65 is directed to an apparatus for "processing outputs of an automatic system for probabilistic detection of events" (claim 65, lines 1-2) that includes means for performing the operations recited in claims 1 and 33. Therefore, it is submitted that claim 65, as well as claims 66-72 which depend therefrom, patentably distinguish over Reich.

Claim 79 is directed to a system for "processing outputs of an automatic system for probabilistic detection of events" (claim 79, lines 1-2) that includes "an interface to receive observed outputs from the automatic system" (claim 79, line 3) and "at least one processor programmed to collect statistics related to the observed outputs of the automatic system and to use the statistics automatically to produce an alternate output sequence" (claim 79, lines 4-6). Therefore, it is submitted that claim 79, as well as claims 80-86 which depend therefrom, patentably distinguish over Reich for reasons similar to those discussed above with respect to claim 1.

#### **Rejection under 35 U.S.C. § 103(a)**

On pages 5-6 of the October 5, 2008 Office Action, claims 15-25, 47-57, 73-78 and 87-92 were rejected under 35 U.S.C. § 103(e) as anticipated by Reich in view of McDonough et al. All that was cited in McDonough et al. was "topic discrimination using posterior probability scores or confidence scores" (Office Action, page 6, lines 5-6) and it was asserted that a person of ordinary skill in the art would find it obvious from column 4, lines 15-20 of McDonough et al. to modify Reich "to improve the performance of the recognizer by making direct use of the confidence scores" (Office Action, page 6, lines 11-12).

It is submitted that what was cited in McDonough et al. would not make it obvious to one of ordinary skill in the art to modify Reich "to process automatically... outputs of an automatic system for probabilistic detection of events" or using statistics "related to observed outputs of the automatic system .. to automatically process an original output sequence of the automatic system and produce an alternate output sequence" as recited in claims 1, 33, 65 and 79, as discussed above. Since claims 15-25, 47-57, 73-78 and 87-92 depend from claims 1, 33, 65 and 79, it is submitted that claims 1-92 patentably distinguish over Reich in view of McDonough et al. for at least the reasons discussed above with respect to claims 1, 33, 65 and 79.

### Summary

It is submitted that the references cited by the Examiner do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-92 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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